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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,710	12/08/2003	John Strassner	CNTW-022/01US	2108
22903 7590 02/17/2009 COOLEY GODWARD KRONISH LLP ATTN: PATENT GROUP Suite 1100 777 - 6th Street, NW WASHINGTON, DC 20001				
EXAMINER				
ANWARI, MACEEH				
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2444				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/730,710

Applicant(s)

STRASSNER ET AL.

Examiner

MACEEH ANWARI

Art Unit

2444

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3- 17 and 19- 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3- 17 and 19- 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S5108)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to communications file on 8/22/2008. **Claim(s) 1, 3, 15, have** been amended. **Claim(s) 24- 32** have been withdrawn. No other claims have been amended, added, or canceled. Accordingly, **claim(s) 1, 3- 17 and 19- 23** are pending.

Response to Arguments

2. Applicant's arguments filed 8/22/2008 have been fully considered but they are not persuasive. In substance the applicant argues that **Stevens** does not teach or disclose: 1) a common translation layer configured to enable a plurality of services to communicate using at least said first and second levels of abstraction, said common translation layer being configured to translate said first level of abstraction for said network resource to said second level of abstraction. Furthermore, 2) the applicant asserts that **claims 1- 14** fall under a statutory category.

3. In response to 2), the examiner respectfully disagrees. Even though (as the applicant pointed out) the claims recite a processor, the applicant has provided evidence (**par. 46**) where this processor can be a server, which is interpreted as software per se. To overcome this rejection, all the applicant has to do is positively recited a storage/memory of some sort connected with this processor.

4. In response to 1), the examiner respectfully disagrees. The applicant employs a vast array of broad terms in an attempt to limit the claims. For example the terms associated, services, resources, abstractions and representation are all very broad; and as such the examiner has interpreted the claims broadly. The term translate can simply

be defined as a process "to bear, carry, or move from one place, position to another (i.e., to transfer);" and as for the term service it can be defined as "an action or response initiated by a process (i.e., a server) at the request of some other process (i.e., client)." As for the terms abstraction and representation they both can be defined as "a presentation." Therefore, the examiner asserts that since **Stevens** discloses a transmission/communication of messages from point A (a point of origin) to point B (a destination point) over the Internet, than **Stevens** reads on the limitations of the claim. In an attempt to explicate this point, the examiner refers the applicant to the rejection of (exemplary) **claim 1** below.

Furthermore, the concepts of data abstraction and translation are clearer stated within **Stevens**:

"Since a schema is an abstraction of a real world entity, such as a network or a portion thereof, e.g., a device in a network, it provides the basis for translating control information received using downloads from directory or other data sources, as illustrated in FIGS. 3 and 4A. Thus, when the interpreted message contents (commands and data, for example) are applied to the schema interface, information is extracted in standardized ways for populating or changing configuration data or table-defined policies (**Col. 6 line 57 - Col. 7 line 29**)."

In order to translate information it would have to be from one form/place to another, and the information would have to be represented in two different ways. **Stevens** also states that messages/data can be distributed through a network such as the Internet (**Col. 13 lines 54- 67**); and as such it is well known to one of ordinary skill in

the art that the Internet predominantly runs on the TCP/IP architecture. The TCP/IP architecture translates (i.e., transfers) a packet of data into multiple levels of abstraction (i.e., data represented in HTTP to TCP to IP to the network interface etc.). Therefore, the examiner asserts that the limitations of the claim have been met.

5. The examiner advises the applicant, to narrow the claims by using more definitive terms (i.e., instead of simply saying "associated with" explain the level of association) and if further clarification is need the applicant is urged to contact the examiner in an attempt to forward prosecution.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1- 14 are rejected under 35 U.S.C. 101 because The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive material" or "non-functional descriptive material." Both types of "descriptive material" are non-statutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium

and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming non-functional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.”).

7. **Claims 1, 3- 17 and 19- 23** are rejected under 35 U.S.C. 102(e) as being anticipated by **Stevens et al.** (hereinafter **Stevens**) U.S. Patent No.: 6,539,425 B1.

Claim 1: An apparatus for provisioning a service using a network comprising: an information model configured to represent at least one function of a network resource to provision said service, said information model configured further to represent a relationship between said service and said at least one function, and to represent a subset of policies to govern operations of said network for provisioning said service (**Figures 1- 7 and Abstract & Col. 2 lines 1- 14 & line 62- Col. 3 line 6; data model, information model and services and policy information**), said information model further comprising:

a first level of abstraction [**device configurations within the data stores**] associated with said network resource [**the data stores or the configuration/policy information itself—i.e., the data**], wherein said first level

of abstraction is a first representation of information describing said network resource (**Fig. 1-7 and Col. 4 line 41- Co. 5 line 13; the data/metadata associated with the device configuration/policy information within the data stores**); and

a second level of abstraction associated with said network resource, wherein said second level of abstraction is a second representation of information describing said network resource, said second representation of information being different than said first representation of information (**Fig. 1-7 and Col. 4 line 41- Co. 5 line 13; this can be the distributed data model or any one of the interpreters used to interpret messages from their original format to a standard schema as in figure 4A**);

a common translation layer configured to enable a plurality of services to communicate using at least said first and second levels of abstraction, said common translation layer being configured to translate said first level of abstraction for said network resource to said second level of abstraction (**Fig. 7 and Col. 4 line 41- Col. 5 line 13; the Internet through TCP/IP, transfers the messages/data between the devices**); and a processor configured to use a subset of business rules to constrain the implementation of said at least one function of said network resource (**Figures 1- 7 and Abstract & Col. 3 lines 54- 61; processor and device configuration/policy information**).

Claim 3: further comprising a common translation layer is configured to translate said first level of abstraction for said network resource to any number of levels of

abstraction, wherein said first level includes one or more levels of abstraction
(Figures 1- 7 and Abstract; schema adaptation layer and message interpreters).

Claim 4: wherein said subset includes at least one business rule for constraining configuration of said network resource **(Figures 1- 7 and Abstract & Col. 1 lines 33- 45 & Col. 6 lines 56- 67; Directory Enabled Networks, industry standards, QoS, and network priorities).**

Claim 5: wherein said subset includes at least one business rule for constraining deployment of said network resource **(Figures 1- 7 and Abstract & Col. 1 lines 33- 45 & Col. 6 lines 56- 67; Directory Enabled Networks, industry standards, QoS, and network priorities).**

Claim 6: wherein said information model comprises: a managed entity data structure for representing said network resource **(Figures 1- 7 and Abstract & Col. 5 lines 3- 13; device data structures);** an upper layer to provide a first level of abstraction for a first portion of said managed entity data structure **(Figures 1- 7 and Abstract; administrators and clients);** and a lower layer to provide a second level of abstraction for a second portion of said managed entity data structure **(Figures 1- 7 and Abstract ; administrators and clients).**

Claim 7: wherein said first level of abstraction is associated with said subset of business rules and said second level of abstraction is associated with configuration data **(Figures 1- 7 and Abstract; administrators, clients and configuration parameters).**

Claim 8: wherein said information model comprises: a managed entity data structure for representing said network resource (**Figures 1- 7 and Abstract; data models, state/policy information and configuration information**); a first subset of levels of abstraction associated with a first portion of said managed entity data structure (**Figures 1- 7 and Abstract Col. 2 lines 17- 37; network manager, high level language and Java**); and a second subset of levels of abstraction associated with a second portion of said managed entity data structure (**Figures 1- 7 and Abstract Col. 2 lines 17- 37; network manager, high level language and Java**).

Claim 9: wherein said first subset of levels of abstraction is associated with said subset of business rules and said second subset of levels of abstraction is associated with configuration data (**Figures 1- 7 and Abstract Col. 2 lines 17- 37; network manager, high level language and Java**).

Claim 10: wherein said configuration data includes at least a command to perform said at least one function of said network resource (**Figures 1- 7 and Abstract & Col. 6 lines 56- 67; message interpreters, and interpreted message commands**).

Claim 11: wherein said information model further comprises another managed entity data structure for representing another network resource (**Figures 1- 7 and Abstract; data models, state/policy information and configuration information**).

Claim 12: wherein said managed entity data structure and said another

managed entity data structure include a first role and a second role, respectively (**Figures 1- 7 and Abstract Col. 2 lines 17- 37; network manager, network administrators and clients**).

Claim 13: wherein said another network resource is a user authorized to implement said network resource (**Figures 1- 7 and Abstract Col. 2 lines 17- 37; network manager, network administrators and clients**).

Claim 14: wherein said information model is a directory enabled network-next generation ("DEN-ng") information model (**Figures 1- 7 and Abstract Col. 2 lines 62- 67; Directory Enabled Networks**).

Claims 15- 17 and 18- 23 list all the same elements as in **claims 1 and 3-14** and are therefore rejected using the same rationale as in **claims 1 and 3-14**.

Examiner Note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in its entirety as potentially teaching of all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MACEEH ANWARI whose telephone number is (571)272-7591. The examiner can normally be reached on Monday-Friday 7:30-5:00 PM ES.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2444

M.A.

/William C. Vaughn, Jr./

Supervisory Patent Examiner, Art Unit 2444